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CONFECTIONERY- A MARKET PROFILE

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CONFECTIONARY

A

MARKET PROFILE

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INTRODUCTION

One consequence of the rapid growth and popularity of television - the latest communication medium of eighties has been the projection into national timelight of hitherto low profile consumer products companies. As the number of television transmitting station has increased from a mere 16 in 1980 to 180 in fiscal 1985-86; and the population of television receiver sets has grown from one million to six million over the same period.

Historical background of Confectionery

The confectionery industry has a historical background revealing far back into antiquity. Its birth was coincident with the discovery by man of the sweetness of honey; its early development is recorded on stone tablets, in the old testament and on papyri and parchment.

The art of confectionery is an ancient one among the oriental nations and can be traced back about 3000 years. Even in those times, people were on the look out for better things in life. The refined tastes of the Greeks and the luxurious habits of the Romans had placed the confectionery in the category of skilled craftsmen. The Romans achieved a high degree of skill in confectionery, but thereafter there was a lull until the process of sugar refining and sugar boiling become known.

History of Confectionery Industry in India

The confectionery industry in India is of comparatively recent origin. Hand made fancy chocolate confectionery prepared from imported chocolate couverture had earlier been catering to the sophisticated taste of the European population and of well-to-do Indians for some years and quite a few confectioneries become household words in the big cities of India. However, chocolate was made all the way from cocoa for the first time in India during the World War II. A small beginning was made during the early part of the war when imports had come to a standstill and the requirement of cocoa powder as well as chocolates were met by indigenous products made in a small company in Pune. Though small, the factory was well equipped with a destoner, ball roaster, winnowing, triple stone mills, granite roller refiner, stone bed conches and moulding plant. Quality, particularly as it relates to particle size, may not have been upto today's standard but was certainly good and acceptable.

Present structure of Confectionery Industry in India

Progress in the Confectionery Industry

After the war the Tariff Commission set up in 1947 to inquire into the status of the cocoa and chocolate industry in India granted protection to the Industry, since it was satisfied that the indigenous industry had the ability to produce the quality required by consumers. Accordingly, the indigenous industry created capacity by import of modern

plant and equipments to cater to the full requirement of the country, as recommended by the commission. The import duty of 30% on cocoa and chocolate products was connected into protective duty and the import duty on cocoa was abolished altogether. Subsequent Tariff Commissions in 1950, 1954 and 1956 have recommended continuance of protection but the Governments did license a multinational company to set up a processing plant. The 1958 Tariff Commission recommended abolition of protection to the chocolate industry. The industry's capacity as recognised early by the Commission was 805 tonnes of covering chocolate and 275 tonnes of cocoa powder. Subsequently a small unit in the private sector and one in the cooperative sector have been licensed and the industry now consists of 5 units making chocolate and chocolate confectionery.

Confectionery is an item of mass consumption that is liked by all children. There are two branches of industry-sugar-boiled confectionery and chocolate confectionery. The organised sector of the industry consists of some 20 units producing sugar-boiled confectionery and 4 making chocolate products. All these units put together produce around 20,000 tonnes of sugar-boiled and about 2,000 tonnes of chocolate confectionery. Further to this, a large number of units in the small scale sector produce sugar-boiled confectionery. While no authentic information is available, production in the unorganised sector may be estimated at around 10,000 tonnes per annum bringing the total production of

confectionery, including chocolate, to 32,000 tonnes. The total value of this production is about Rs.50 crores per annum and the contribution by the organised sector in terms of excise duty on raw materials and packaging, and on finished products would be of the order of about Rs.6 crores. Besides the State Governments also levy octroi duty and sales tax on confectionery, the contributions from which is quite substantial. Confectionery industry is labour intensive and employs a sizeable labour force. A large number of retailers spread all over the country make their living on sales of confectionery. The confectionery industry thus plays an important role in the national economy.

In India, confectionery can be broadly divided into four types, viz.,

1. Sugar boiled confectionery
2. Chocolate confectionery
3. Toffee
4. Chewing gum and bubble gum

Sugar boiled confectionery is one of the most popular confectionery in India. Sugar is the major raw material used by this Industry. Sugar boiled confectionery industry is a bulk consumer of sugar. There are 24 units in organised sector in 1982, installed capacity being 36,000 tonnes.

Chocolate and Toffee confectionery falls within the general category of confectionery. Cocoa is one of the main ingredients for chocolate. According to Ministry of

Industry, there are five chocolate processing industries with an installed capacity of 3450 tonnes by the end of 1981. Their production increased from 1190 tonnes in 1980 to 3058 tonnes in 1981.

There are major two units started manufacturing the gum base in India. The chewing gum industry has made some progress though plant and machinery have to be imported.

CONFECTIONERY INDUSTRY - AN OVERVIEW

The confectionery industry was initially started by a few sugar mills as an adjunct to their sugar making activities. Later, when demand for confectionery picked up, new units independent of sugar mill, came into existence mostly concentrated in big cities. The development of confectionery industry has been linked with the process of sugar industry and its production fluctuated with availability of sugar and its price. In India, the confectionery industry is listed along with a number of others, among those that have been reserved for the small scale sector. The output of the confectionery industry has hardly accounted for 30% of its installed capacity, resulting in highly uneconomic working.

Process in the Confectionery Industry

The installed capacity of confectionery industry according to the annual report of the Ministry of Industry was of the order of 35,930 tonnes in 1986-87 compared to 12,690 tonnes in 1976. There are 22 manufacturers engaged in this line.

Sugar-boiled Confectionery

The sugar-boiled confectionery industry in India was mainly developed during the second World War and the immediate post-war years following cancellation of foreign imports and increase in internal demand. Within a short span

of two or three years, as many as 30 units were set up in the organised sector. Production accordingly increased during the period and not only did India become self-sufficient, but also exported sizeable quantities of confectionery to the Middle-Eastern countries. However, with the imposition of control on sugar in 1950, the production of confectionery was indirectly regulated through control over the release of sugar. The confectionery industry received a lower priority in sugar allotment and its requirements and survived only after meeting the domestic requirements of consumers through public distribution channels. As a result, the installed capacity in the industry remained under-utilised. This position continued till 1967, as there was control over prices and movement of sugar except for short period of decontrol now and then.

The confectionery industry, which was hitherto getting its supply of levy sugar at controlled prices, had to buy sugar from the open market at the prevailing high prices. A number of units in this industry found it uneconomical to operate with both a high price of its main raw material sugar and the high rate of excise duty on confectionery.

Development of sugar-boiled confectionery industry reflects the availability of sugar within the country at reasonable prices. There has been a steady increase in the production of sugar in the country, and this upward trend is expected to continue. The confectionery industry could play a vital role in increasing sugar consumption notionally.

In India, where the per capita daily consumption of confectionery is only a few grams, there is good scope for increasing intake and consequently increasing sugar consumption.

Toffees

Toffee generally are found in three varieties in Indian shops. They are plain toffees, milk toffees and modified toffees.

Toffees are the mixture of sugar and glucose, boiled together with added milk, colouring and flavouring, with some fat or butter. Toffees are fairly hard, since they are cooked to a higher temperature resulting in lower moisture content.

Following Table gives the production of confectionery in India.

Capacity and Production of Major Confectionery Industry (DGTD) During the last Five Years (1980-84)

	1980	1981	1982	1983	1984	1985	1986
No. of units	22	22	22	22	22	22	22
Installed capacity	35928	35928	35928	35928	35928	35928	35928
Production :							
- quantity*	19171	21200	22600	24000	25000	23000	26000
- value**	-	-	3500	3840	4000	-	-

* Tons

** Rs. lakhs

Chocolate

The chocolate industry in India is of comparatively recent origin. Cocoa is a very important raw material used in manufacture of chocolate. The Indian climate is basically tropical.

The major contribution in chocolate is by Hindustan Cocoa Products. During the year 1980 there was a decline in chocolate production. However, it has again picked up from 1195 tonnes in 1980 to 1350 tonnes in 1981. This drastic change was due to the non-production year in Hindustan Cocoa Products.

The chocolate production in All India level is detailed in the following Table.

All India Production of Chocolates

Year	Quantity (Tonnes)	Value (Rs. lakhs)	No. of units
1975	1500	235	3
1976	1800	276	5
1977	2017	379	5
1978	1800	619	5
1979	NA	NA	5
1980	1195	NA	5
1981	1350	NA	5
1982	2630	NA	5
1983	4387	2210	6
1984	6000	3500	6
1985	7260	-	6
1986	7600	-	6

Capacity and Production of Chocolate in major
Industry during the last five years (1980-84)

	1980	1981	1982	1983	1984	1985	1986
No. of units	5	5	5	6	6	6	6
Installed capacity	3450	3450	3450	8497	8497	8497	8497
Production :							
- quantity*	1195	1350	2630	4387	6000	7260	7600
- value**	-	-	1500	2210	3500	-	-
* Tonnes							
** Rs. in lakhs							

Chewing Gum

Until about 15 years ago, there was no unit manufacturing chewing gum bases in India and the entire gum base was imported. However, in the early 70s, two units started manufacturing the gum base with foreign technical knowhow and thereafter the chewing gum industry has made some progress in India. The supply of gum base is not adequate enough to achieve greater expansion of and progress in the industry.

The chewing gum industry requires sophisticated plant and machinery such as mixers, extruders, rolling and scaring machines, coating equipments, wrapping and packaging machinery.

The technical knowhow and manufacturing process applicable in the chewing gum industry is entirely different from those of the confectionery industry, though certain operations such as packing and marking as well as wrapping

are common. The gum base which is the basic raw material for the chewing gum industry has to conform to strict technical specifications to make the product "good chew".

Chewing gum characteristics

Chewing gum contains sugar, flavourings, colourants, and chicle gum, but at present synthetic gum bases such as polyvinyl and acetate are being used.

Chewing gum entered Indian market about a decade ago, National Products being pioneer in the field. The present sales of National Products is reported to be around Rs.12 crores.

National Products Chewing Company Limited, which has an estimated 60% share in the 15 crore domestic market.

The chewing gum market in India is fast picking up at a rate of 20% annually and is expected to produce 15,000 tonnes per annum valued at Rs.40 crore by 1990. It is reported that market for chewing gum is growing much faster in the eastern sector.

RAW MATERIALS

Cocoa in Confectionery

Cocoa is a very important raw material in confectionery. Its most important use is in the production of chocolates and chocolate-coated or enroled confectionery.

India was importing almost its entire requirement of cocoa beans until 1974 and till the internal production

started becoming available. Since then, there has been a steady growth in the country's production of cocoa. Commercial cultivation was started first during the Third Five Year Plan period with the sanctioning of a scheme for the development of its cultivation in the southern states of Kerala, Tamil Nadu and Karnataka.

There are nine units engaged in the manufacture of cocoa products and together they have a production capacity of 14,705 tonnes per annum. Additional capacity of 27,400 tonnes has been approved.

From the overall view, it is noticed that chocolate industry will form the major user of cocoa; ie., 700 tonnes by chocolate industry. Following Table gives the sugar production in India which is one of the major ingredients in confectioneries.

INDIAN SUGAR

Statement showing figures of area under Sugarcane, yield of Sugarcane, Production, Number of Factories and Sugar Production (1975-76 to 1984-85)

Year	Area under sugarcane ('000 Ha.)	Production of sugarcane ('000 T)	No. of factories in operation	Total sugar production ('000 T)
1975-76	2,762	1,40,604	253	4,262
1976-77	2,866	1,53,007	271	4,840
1977-78	3,151	1,76,965	286	6,457
1978-79	3,088	1,51,655	299	5,842
1979-80	2,610	1,28,833	299	3,858
1980-81	2,667	1,54,248	314	5,147
1981-82	3,193	1,86,358	319	8,436
1982-83	3,358	1,89,505	320	8,232
1983-84	3,167	1,77,020	325	5,916
1984-85	2,920	1,75,000	339	6,144

CONFECTIONERY - A MARKET PROFILE

Consumer Profile (Household Survey)

The survey has been taken up in 111 households in Mysore city.

As seen from the Table, the expenditure on confectionery has a direct relationship to income groups. Higher the income more the expenditure on confectionery. Thirty five per cent of high income group and ten per cent of other income group spend more than Rs.75/- per month on confectionery.

There is no much relationship between the number of children in a family and expenditure on confectionery.

Family Income v/s Expenditure

Expenditure per month	Family Income	
	High	Others
Rs. 1-25	18%	48%
Rs. 26-50	32%	28%
Rs. 51-75	15%	14%
Rs. 76 and above	35%	10%

No. of Children v/s Expenditure

Expenditure per month	No. of children		
	1-2	2-3	More than 3
Rs. 1-25	43%	36%	14%
Rs. 26-50	32%	32%	14%
Rs. 51-75	15%	8%	28%
Rs. 76 and above	10%	24%	24%

The study conducted reveals that the higher income groups tend to spend more on milk chocolates when compared to other types of confectionery. Eighty-three per cent of higher income groups spend maximum on milk chocolate alone and sixty per cent of other income groups fall in line with that groups.

Types of Chocolates v/s Income

Types of Chocolates	Income groups	
	High	Others
Milk chocolate	83.00%	60%
Eclairs	12.00%	28%
Chewing gum	2.50%	6%
Others	2.50%	6%

Different Brands of Chocolate and their Brand Preference

Types of Chocolates	Income groups	
	High	Others
Cadbury's -		
5-Star	17 }	21 }
Gems	27 }	20 }
Dairy Milk Chocolate	10 }	10 }
Others	11 }	19 }
	65%	70%
Amul chocolate	35%	30%

Different Brands of Eclairs & Preference by Income Group

Types of Eclairs	Income groups	
	High	Others
Cadbury's	90%	93%
Parry's	3%	2%
Nutrine	3%	2%
Others	4%	3%

Brand Preference For Chewing Gum/Bubble Gum by Income Group

Brand	Income groups	
	High	Others
N.P.	43%	35%
O.K.	6%	-
Big Fun	51%	65%

Brand Preference For Other Types of Confectionery
By Income Groups

Brand	Income groups		
	High	Others	Lower
Nutrine	37%	31%	36%
Parry's	40%	44%	54%
Ravalgaon	23%	25%	10%

Sixty-two per cent of households feel that milk bar is good for health, whereas thirty-one per cent of households feel that other types of confectionery are good for health. Twenty-one per cent feel that milk bar is bad and thirty-four per cent feel that other types of confectionery are bad for health.

Eleven per cent of consumers have no definite opinion on milk bars effects on health. Fifteen per cent of consumer of other types of confectionery do not have any idea about its effects on health.

TABLE : Different Types of Confectionery v/s Opinion on Effect on Health

Effect on health	Confectionery	
	Milk chocolate	Other types of confectionery
Good	62%	31%
Bad	27%	54%
No effect	6%	10%
Do not know	5%	5%

Milk Bar and Opinion on Effect of Health v/s Expenditure on Confectionery

Expenditure	Effect on health			
	Good	Bad	No Effect	Do not know
Rs. 0-25	51%	33%	8%	8%
Rs. 26-50	65%	25%	5%	5%
Rs. 51-75	70%	20%	4%	6%
Rs. 76 & above	84%	12%	4%	-

Retail Audit Survey

A retail audit survey was conducted in Mysore City with 21 retailers. Following Table gives the results of the survey.

Floor Space

Size of the shop			Total No. of shops (covered under survey)
Small	Medium	Big	
2	5	14	21

Retailers Dealing Different Types of Cadbury's
and Amul Chocolates

Cadbury's Brand	Total No. of shops	Amul Brand	Total No. of shops
5-Star	21	Crisp	19
Gems	21	Orange chocolate	21
Krisp	20	Coffee chocolate	20
Double Dekker	19	Milk chocolate	21
Fruit & Nut	18	Fruit & Nut	21
Dairy Milk Chocolate	21	Bitter Chocolate	20
Nutties	19	Others	11
Others	10		

The following table gives the ranking by the
retailers on reasons for its success.

Milk Chocolate and Reasons for Success

Reasons	Ranking					
	1	2	3	4	5	6
Company image	1	2	9	8	1	-
Price	-	-	9	7	4	1
Advertising	-	1	2	4	13	1
Distribution	-	-	-	1	2	18
Taste & Quality	5	14	1	1	-	-
Packing	15	4	-	-	1	1

TABLE : Retailers Dealing Different Types Of Eclairs

Eclairs	Total No. of retails	Fast moving brand (No. of retailers)
Cadbury's	21	20
Parry's	7	1
Nutrine	10	-
Ravalgaon	1	-

Eclairs and Reason for its Success

Reasons for success	Ranking					
	1	2	3	4	5	6
Company image	3	7	8	2	-	1
Price	1	9	6	3	1	1
Advertising	-	-	4	10	6	1
Distribution	-	-	-	13	13	5
Taste & Quality	17	2	1	-	-	1
Packing	-	3	2	3	1	12

Retailer Dealing in Different Types of Chewing Gum

Types of brands	Total No. of shops dealing	Fast moving brand (No. of retailers)
N.P. and O.K.	20	11
Big fun	20	7
Fresh-n-up	1	3

Chewing Gum and its Reasons for Success

Reasons for success	Ranking					
	1	2	3	4	5	6
Company image	-	2	4	10	3	1
Price	-	3	10	3	2	2
Advertisement	-	2	5	5	8	-
Distribution	-	1	-	-	5	14
Taste & Quality	7	6	-	2	2	3
Others	13	6	1	-	-	-

Retailers Dealing with Different Types of Confectionery

Different other types of confectionery	Total No. of shops dealing	Fast moving brand (opinion by No. of retailers)
Hard boiled sweet	19	12
Poppins types	21	1
Toffees	19	6
Lollipop	21	1
Others (loose sweets)	20	1

Other Types of Confectionery and Reasons for their Success

Reasons for success	Ranking					
	1	2	3	4	5	6
Company image	-	5	12	4	-	-
Price	1	11	8	1	-	-
Advertising	5	3	-	13	-	-
Distribution	-	1	-	3	17	-
Taste & Quality	15	1	1	-	14	-

Company Image - as reason for success/Retailers Opinion

Types of confectionery	Ranking reasons					
	1	2	3	4	5	6
Milk chocolate	5%	9%	43%	38%	5%	-
	14%			43%		
Eclairs	14%	34%	38%	10%	-	5%
	48%			15%		
Chewing gum	-	10%	20%	50%	15%	5%
	10%			70%		
Others	-	29%	57%	14%	-	-
				14%		

Price Advantage - as reason for success

Types of confectionery	Ranking reasons					
	1	2	3	4	5	6
Milk chocolate	-	-	43%	33%	20%	4%
					24%	
Eclairs	4%	43%	28%	15%	5%	5%
	47%				10%	
Chewing gum	-	15%	30%	15%	10%	10%
	15%				20%	
Others	5%	52%	38%	5%	-	-
	57%					

Distribution - as reason for success

Types of confectionery	Ranking reasons					
	1	2	3	4	5	6
Milk chocolate	-	-	-	5%	10%	85%
					95%	
Eclairs	-	-	-	15%	61%	24%
					85%	
Chewing gum	-	5%	-	-	25%	70%
					95%	
Others	-	5%	-	15%	80%	-
					80%	

Taste and Quality - as reason for success

Types of confectionery	Ranking reasons					
	1	2	3	4	5	6
Milk chocolate	23% 	67% 	5% 	5% 	-	-
	90%		10%			
Eclairs	80% 	10% 	5%	-	-	5%
	90%					
Chewing gum	35% 	30% 	-	10%	10% 	15%
	65%				25%	
Others	70% 	5% 	5%	-	20%	-
	75%					

Following Table gives the profile of confectionery available in the market.

Milk Bar - Cadbury's

Name of the chocolate	Types	Grams/pack	Price/packet
5-Star	Small	20	Rs. 2.10
	Big	35	Rs. 3.40
Gems	Big	30	Rs. 3.40
	Small	15	Rs. 1.70
Krisp		30	Rs. 3.40
Double Dekker	Big	35	Rs. 3.40
Dairy Milk Chocolate	Big	40	Rs. 4.40
	Medium	20	Rs. 2.50
	Small	10	Rs. 2.10

Amul Chocolate

Name of the Chocolate	Gram/pack	Price/Packet
Crisp	40	Rs. 3.60
Orange	40	Rs. 3.60
Coffee	40	Rs. 3.60
Fruit and Nut	40	Rs. 4.75
Milk Chocolate	40	Rs. 3.60
Bitter chocolate	40	Rs. 3.60

Eclairs

Types of Eclairs	Price/Kg
Cadbury's Eclairs	Rs. 67.00
Cocoa Ravalgaon	Rs. 52.10
Parry's	Rs. 60.00
Nutrine	Rs. 60.00

Hard-boiled Confectionery

Types	Brand	Price/kg.(Rs.)
Poppins	Parle	30.00
Mint Rose	Parle	60.00
Mylady Chocolate Toffee	Parle	26.00
Fruit Punch	N.P.	42.00
Minti	N.P.	50.00
Ravalgaon Toffees	Ravalgaon	25.00
Lemon Mint	Ravalgaon	60.00
Orange	Nutrine	26.00
Fruit Roll	Nutrine	30.00
Sony	Happy	15.00
Caramella	Nutrine	65.00

Chewing Gum

Types	Brand	Price/kg.(Rs.)
Bubble Gum	N.P.	0.20
Fruit Ball Gum	N.P.	0.50
Doubleyum	N.P.	0.50
Mini Chewing Gum	N.P.	2.50
Fiky Foxy	N.P.	2.50
Chewing Gum	N.P.	0.25
Crackies	N.P.	0.25
Double Bubble Gum	n.P.	0.25
Double Bubble Gum (Big)	N.P.	1.50
Double Bubble Gum	O.K.	0.30

Others

Big Fun	0.35
Fresh-N-Up	2.00

Other Types of Confectionery

Types of confectionery	Brand	Price/kg.(Rs.)
Poppins	Ravalgaon	32.00
Coffee Toffee	Ravalgaon	42.00
Plain Toffee	Ravalgaon	32.00
Ordinary	Ravalgaon	30.00
Cocoanut	Ravalgaon	30.00
Lolli Pop	Parry's	50.00
Lolli Pop	Cadbury's	70.00

DEMAND FORECASTING

Chocolates

Multiple linear regression equation taking production of chocolates as dependent variable (y) and per capita income (x_1) and children (< 14 yrs) population (x_2) [taking only 10% of these accounting for higher income group-] as independent variables, over a period of five years was found to be

$$y = 9842.59 + 10.85x_1 - 861.79x_2$$

Only 10% of child population in India has been taken into account since survey has clearly shown that chocolate is an item patronised by the high income group.

Following is the production of chocolate from 1975 to 1984.

Using this equation, the projected demand for chocolates during 1991 would be 9944.

Chocolate Production (India) (In Tonnes)

1975	-	1150
1980	-	1195
1981	-	1350
1982	-	2630
1983	-	4387
1984	-	6000
1991*	-	9944

*Projected

Demand for Confectionery in Mysore City

No published data is available on production of confectionery except in the case of milk chocolate. Due to non-availability of past data regression method cannot be employed for projection for demand.

Based on retail audit survey, the value of sales of different types of confectionery has been obtained. This data pertains to 22 retailers in the city. It has emerged from the survey that almost all the retailers are dealing with all the four types of confectionery, however it has been observed that milk chocolate, eclairs and chewing gum is not widely distributed as that of other hard boiled and toffee type of confectionery. On the assumption that there could be totally 100 retailers dealing with milk chocolate, eclairs and chewing gum out of the total numbers of retailers in Mysore city and if there are 300 retailers dealing with other types of confectionery ie., hard boiled, toffees, etc., the following could be the sale of confectionery in Mysore city.

Value of Confectionery Sales in Mysore City/Month

	<u>Rs.</u>	<u>Percent</u>
Hard boiled/toffees etc.	1,92,500	56
Milk chocolate	80,545	23
Eclairs	40,220	12
Chewing Gum	30,680	9
	-----	---
Total	3,43,945	100
	-----	---

Appendix**ISI STANDARDS**Requirements of Hard-boiled Sugar Confectionery

Sl. No.	Characteristics	Require-ments		Method of test (IS:6287-1987)
1.	Ash sulphated % by mass, max.	1.5		5
2.	Acid insoluble ash % by mass, max.	0.2		6
3.	Sulphur dioxide mg/kg. max.	350		11
4.	Arsenic mg/kg, max.	60		12
5.	Lead mg/kg, max.	20		13
6.	Copper mg/kg, max.	5		14
7.	Zinc mg/kg, max.	5		15
8.	Tin mg/kg, max.	5		16

Requirements for Chewing Gum and Bubble Gum

Sl. No.	Characteristics	Requirements		Methods of test (IS:6287-1971)
		Chewing gum	Bubble gum	
1.	Moisture, % by mass, max.	3.5	3.5	4
2.	Ash sulphated % by mass, max.	9.5	11.5	5
3.	Acid insoluble ash % by mass, max.	2.0	3.5	6
4.	Reducing sugar % by mass, min.	4.5	5.5	7
5.	Sucrose % by mass, max.	70.0	60.0	8

CONCLUSION

For purpose of this study, confectionery was mainly divided into 4 types - (1) Milk chocolate; (2) Eclairs; (3) Chewing gum and (4) Other types of confectionery.

Market for confectionery has shown a tremendous growth. Milk chocolate is the most highly priced item. The price varies between Rs.100 per kg to Rs.80 per kg. The market for milk chocolate is mainly shared by two manufacturers.

In the case of Eclairs, there are three popular brands. Chewing gum market is mainly dominated by one single brand. Hard-boiled and other types of confectionery are being manufactured by large number of small scale as well as 22 large scale units.

The buying motives and type of customers, who patronise the four types of confectionery has shown a variation. An overall picture shows that there is direct relationship between income and expenditure on confectionery.

In the case of milk chocolates, it is noticed that it is the high income group who spends maximum on this item. As per retailers opinion, in case of milk chocolate, packaging and taste and quality plays an important part in the brand's success, whereas in the case of Eclairs, taste and quality along with company image are the most contributing factors for success of a brand.

In the case of chewing gum, according to retailers "point of sales promotion", i.e., offering incentives such as stickers and such other attractive gifts for children plays an important factor in the brand's success.

The picture is slightly different in case of other types of confetionery. Taste and quality along with prices are the main contributing factors for the success of a brand.

In terms of sales value, milk chocolate contribute to maximum sales.

Requirements for Chocolate

Sl. No.	Characteristics	Requirements for				Method of test (IS: 1167-1958)
		Unsweet covering chocolate	Plain chocolate covering chocolate	Milk chocolate	Milk chocolate	
1.	Moisture, % by wt. max.	3.0	3.0	3.0	3.0	A
2.	Total fat (on moisture free basis), % by wt. max.	50.0	27.0	30.0	27.0	30.0
3.	Sugar (sucrose), % by wt. max.	-	80.0	80.0	70.0	70.0
4.	Total ash (on moisture, fat & sugar free basis) % by wt. max.	8.0	8.0	8.0	8.0	8.0
5.	Acid insoluble ash (on moisture, fat and sugar free basis), % by wt. max	0.20	0.20	0.20	0.20	0.20
6.	Crude fibre (on moisture, fat, sugar and milk free basis), % by wt. max.	7.0	7.0	7.0	7.0	7.0

Requirements for Toffees

Sl. No.	Characteristics	Requirements			Method of Test	
		Plain toffee	Milk toffee	Modified toffee	This Standard	(IS:1667-1971)
1.	Moisture, % by mass, max.	8.0	8.0	8.0	--	4
2.	Ash sulphate, % by mass, max.	2.5	2.5	2.5	--	5
3.	Acid insoluble ash, % by mass, max.	0.2	0.2	0.2	--	6
4.	Reducing sugar (calculated as dextrose) % by mass, min.	10.0	10.0	10.0	--	7
5.	Sucrose, % by mass, max.	60.0	60.0	60.0	--	8
6.	Fat (on dry basis), % by mass, min.	4.0	4.0	4.0	--	9
7.	Protein (Nx6.25), % by mass, min.	--	3.0	--	--	10
8.	Lactose, % by mass, min.	--	3.5	--	71.0	-



MARKET INTELLIGENCE



NEW PROCESSED FOOD PRODUCTS

<u>Address</u>	<u>Brand Name</u>	<u>Product</u>
1. Ennar Refineries Pvt.Ltd., Tumkur	'NR'	Refined ground-nut oil
2. Khatias Food Industries Cochin - 682 016.		Canned fruits, pickles, sauces, masala powders
3. OILFED (M.P. Govt. Undertaking) Co-operative Oilseeds Growers' Federation, Ujjain.	RANGOLI	Soya oil
4. Jaya Food Industries Pvt.Ltd., Bangalore.	-	Instant mixes
5. J.K.D. Frozen Foods Pvt. Ltd., C-1-4515, Phase IV, GIDC Estate, Vatva, Ahmedabad - 382 445.	THUNDA	Soft drink
6. The Anand Foods, Flavours & Fragrancy, Nasik.	POORANPOLY	Instant pooran-poly mix
7. National Dairy Development Board, Anand (Gujarat)	DHARA	Refined vegetable oil
8. FLEX Laminates M-107, Greater Kailash, New Delhi - 110 048-	-	Flexible laminates, pouches, stand-up pouches
9. Manish Trading Company Sitabuldi, Nagpur.	FRY-N-FRY	Ready to fry snacks
10. P.L. Chemicals Ltd., Madras.	TOPPS	Pickles, jams, sauces
11. Gurukar Plastics Ltd., 30, Nehru Circle, Bangalore - 560 020.	-	5 layer co-extruded film
12. Associated Beverages Pvt. Ltd., BURNIHAT, Meghalaya.	GOLDPINE	Jams and marmalade

- | | | |
|--|------------|--|
| 13. MAF Co. Ltd.,
Mistry Bhavan, 6th Floor
Dinshaw Vachha Road,
Bombay - 400 020. | PREMIER | Instant
gravies |
| 14. Progressive Food Products,
Nagpur - 440 016. | STAMINA | Tomato
ketchup |
| 15. Emissarr Business
Combine (P) Ltd.,
Kalina,
Bombay - 400 098. | SEAFER | Prawn wafers &
fish wafers |
| 16. Tasty Bite Eatables
Continental Building,
135, Dr. A.B.Rd., Worli,
Bombay - 400 018. | TASTY BITE | Ready to eat
vegetable cu-
rries (Pav
bhajji, Palak
paneer, dal ma-
khani and alu
chole) |
| 17. Wandby's Products
66, Marine Drive,
Bombay - 400 020. | WANDBY | Green chilli
sauce, chilli
garlic sauce &
worchester
sauce |
| 18. Phondogat Pharmacy,
Bombay - 400 018. | - | Bel murabba,
Amla murabba &
Apple murabba |
| 19. Reliance Trading Co.,
Bombay - 400 058. | ANCHOR | Instant ice
cream mix |
| 20. S.M. Foods,
S.M. House,
11, Sahakar Road,
Vile Parle (E),
Bombay - 400 057. | SAMS | Ready to eat
snack foods |
| 21. Haryali Products,
155/1, Subbarama Chetty
Circle,
Basavanagudi,
Bangalore - 560 004. | HARIYALI | Instant mixes |
| 22. Convenience Food Corporates, COFCO
18/8, Hadapsar Ind. Estate,
Pune - 411 013. | | Soup mixes |
| 23. Sreeram Oil & General Mill,
Gurgaon. | GOLDPICK | Corn flakes |

- | | | |
|---|---------------|--|
| 24. RAICO,
4018, HAL II Stage,
Indira Nagar,
Bangalore - 560 038. | RAICO | Edible soya
flour, |
| 25. Anand Brothers,
Ibrahim Sahib Street,
Bangalore. | ANAND | Lotus seeds,
Dehydrated
potato wafers |
| 26. EIMAC,
2018, A.K. Market,
Siddique Lane,
Calcutta - 700 016. | ELMAC | Sauces |
| 27. SING CHEUNG
Sauce Factory,
15, South Tangra Road,
Calcutta - 700 046. | SINGCHEUNG | Chilli sauce,
Worchaster
sauce |
| 28. J.B. Kindos
Dooravani Nagar,
Bangalore - 560 016. | KINDOS | Peanut butter |
| 29. Preethi Foods,
128, Shanthi Indl. Estate,
Sarojani Naidu Road,
Mulund, Bombay - 400 080. | TOP | Mayonnaise and
Bamboo shoots
in brine, |
| 30. Bawa Fruit Products,
B-25, Lawrence Road,
Industrial Area,
Delhi. | GOLDEN DRAGON | Cocktail onions
and sauces |
| 31. Best Products Co.,
95, Appu Rao Road,
1st Cross,
Bangalore - 560 018. | BEST | Instant mixes |
| 32. Asia Tea Enterprises,
Ketti (PO),
Nilgiris - 643 215. | - | Instant tea |
| 33. Mahadeo Fruit Processing
Industry,
Kishanganj (Purnea)-855107. | TISTA | Canned
mushroom |
| 34. SIL
14, Best Club,
Pune. | SIL | Canned baked
beans and
corn syrup |

- | | | |
|--|--------------------|------------------------------|
| 35. T.A. Vasu,
617, T.H. Road,
Tondair Pet,
Madras - 600 081. | VASU | Mini papads
(Appalam) |
| 36. India Sweet Co.,
18, Abbu Naick Street,
Madras - 600 034. | RAJARAM &
PROTY | Peanut candy |
| 36. -do- | DUMDUM
MALTAA | Sesame candy
Cashew candy |

FOOD MACHINERY AND EQUIPMENT

<u>Address</u>	<u>Brand Name</u>	<u>Product</u>
1. Frederick Herbert, P.S. Trading Company, 10, 2nd Pasta Lane, Colaba, Bombay - 400 005.	MAGIC MILL	Domestic pulveriser
2. H.R. Gopalswamy Engineers, Nakwawadi, T.J. Road, Sewri, Bombay - 400 015.		Automatic milk chilling equipment
3. Orient Electronics, 143-144, Sector 8C, Chandigarh	MERRIMIX	Fizzy drink or sparkling soda maker
4. FLEX Laminators Ltd., M-107, Greater Kailash, New Delhi - 110 048.		Packing machine for liquid and powder
5. G. Gopalaswamy, Nakava Vadi Tokershi Jeevaraj Road, Bombay - 400 015.		Milk processing tank
6. Harman Serafin. Spart Electric Works, Gondia (M.S.)		Modified poha machine
7. RESCH Extraction Technic India Ltd., Plot No.9-C, SIPCOT Industrial Complex, Hosur - 635 126.	RETIL	Co-extrusion machine

2.3 PROCESSED FOOD INDUSTRY - NEWS AND EVENTS :

1. Britannia Industries - Progress

Britannia Industries, a highly diversified Company has emerged as a leader in the bakery business and as one of the large processed food manufacturing companies in the country. It is also a registered "export house" exporting cashew kernels to U.S.A. and U.S.S.R., frozen shrimps to Japan and biscuits, spices and pickles to Middle East. During this year, the integrated soya plant at Vidisha, the first major diversification venture commenced commercial production. The gross sales registered a growth rate of 19% due to the domestic sales of bakery products and newly launched soya oils.

2. Pineapple juice concentrate plant in Tripura

The country's first pineapple juice plant incorporating the latest technology has been set up in the Nalkate Pineapple Belt of Tripura by the North Eastern Regional Agricultural Marketing Corporation (NERAMAC) at a cost of Rs.37.5 crores. The plant contains state-of-the art technology from the U.S., Italy and Sweden for the manufacture of the best quality fruit juice concentrates. The plant is capable of producing 152-200 kg concentrate per hour.

3. Goodricke to make instant tea

Goodricke Group Limited is installing a pilot plant at Danguajhar tea estate for manufacture of instant tea. The

Rs.50 lakh pilot project would be followed by Rs.3 crore full scale plant which was expected to go into commercial production by 1989. In the initial stages, the Company is projecting exports of around 1.5 lakh kg of instant tea primarily to U.S.A. and Britain.

4. Hindustan Cocoa - Growth in net sales

Hindustan Cocoa (formerly Cadbury India) manufactures a wide range of products like malted foods, cocoa powder, drinking chocolates, variety of chocolates and milk based products into the market over the years. However in terms of sales income, chocolates continue to dominate the product range. The share of chocolates has gone up from 49% in 1982 to 63.8% in 1987. The market for milk and malt based products has grown in volume as well as in intensity of competition.

The Company proposes to set up a new chocolate factory at Malanpur in Madhya Pradesh, creating a new capacity for chocolates.

5. Alcohol production

<u>Year</u>	<u>Production (Million litres)</u>
1971-72	260.0
1975-76	408.2
1976-77	449.2
1977-78	500.7
1978-79	438.0
1979-80	385.9
1980-81	406.5
1981-82	480.8
1982-83	449.1
1983-84	528.6
1984-85	589.4
1985-86	578.1
1986-87	616.0
1987-88 (Estimate)	796.0

6. Milk Production and Per Capita Consumption

<u>Year</u>	<u>Production (Million litres)</u>	<u>Per capita consumption (Grams)</u>
1951	17.41	132
1956	19.72	135
1961	20.54	121
1966	19.57	108
1976	22.5	112
1978	28.4	125
1981	34.3	137
1986	42.5	154
1987	44.0	158

7. Jagatjit Industries plans to upgrade product mix

The Company plans to upgrade the product mix and introduce new brands in its lucrative liquor and malted milk food business. Plans are to improve the market share of malted products from the present 16% to 20% in the next two years, while the liquor share is sought to be increased substantially from the present 18%.

The Company has ventured into trading of shrimps in a large way, accounting to Rs.8 crores. Liquor accounts for the bulk of the sales at Rs.87 crores and rest of Rs.25 crores is made up of malt, malt extract, malted milk products and bottles.

8. Pepsico Project in Punjab

The Rs.22 crore PEPSICO Project consists of an establishment of an agro-research centre, a potato and grain processing unit, a fruit and vegetable processing unit and a soft drink concentrate manufacturing unit.

PEPSICO will invest Rs.3.59 crores in the project and Punjab Agro Industries Corporation (PAIC) and Tata's Rs.5.41 crores. This will be an Indian Company having foreign collaboration.

The biggest advantage of the project is that 50% of its total production will be exported. Soft drink manufacture

will be limited to 25% of total turnover. More than 25% of fruit and vegetable crop of Punjab will be processed and Rs.20 crore worth of agricultural products will be exported in the first year itself.

9. Market shares of soft drinks

<u>Year</u>	<u>Company's % share</u>			
	<u>PARLE</u>	<u>PURE DRINKS</u>	<u>MC DOWELLS</u>	<u>OTHERS</u>
1978	33%	28%	-	39%
1983	43%	22%	-	32%
1987	44%	21%	7%	28%

*Excluding soda

10. LIPTON - Sales Turnover during 1986-87

	(in %)
Tea	43.27
Vanaspati & Refined oils	40.90
Animal feeds	8.83
Others	7.00

Total sales accounted to 341.65 crore.

11. AVERY INDIA

A principal manufacturer of weighing machines in the country, Avery India has collaborated in a joint venture with Carl Schenk of West Germany to manufacture dynamic balancing machines and vibration monitoring equipment. This part of

expansion programme includes the production of computer controlled gravimetric and volumetric liquid filling machines, automatic check weighers and vibratory weighers.

12. IMFL Market Shares

Group

United Breweries	33%
Shaw Wallace	22%
Jagatjit Industries	15%
Mohan Meakins	9%
Khoday's	7%
Others	14%

